



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,283	11/05/2001	Douglas F. Connor	020431.1055	7058
53184	7590	01/04/2006	EXAMINER	
i2 TECHNOLOGIES US, INC. ONE i2 PLACE, 11701 LUNA ROAD DALLAS, TX 75234			KRISCIUNAS, LINDA MARY	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,283

Applicant(s)

CONNOR ET AL.

Examiner

Linda Krisciunas

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Nov 5, 2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 9, 11-15, 20, 22-26, 31, and 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwartz (US 2003/0037063).

As per claims 1, 12, 23, and 34-35, Schwartz teaches a system for generating risk assessment regarding software implementation projects comprising (paragraph 24: "the invention is directed to a network based method and system for risk assessment, risk monitoring and caseload management" whereby the exact field that the invention is used for is not a limitation as risk assessment is applicable across a range of fields.): access a specified importance value and maximum score for each risk factor (paragraph 96: "Decision block 417 represents a process where an initially assessed risk score is compared to a maximum acceptable value. If the assessed risk score does not exceed the acceptable value, no unacceptable risk is present and the system returns to standby mode (process 404). If the initial score is indicative of unacceptable risk (high risk), process 428 is performed to determine and store an initial "goal." The initial goal may be determined by a worker or generated automatically by system software 324."), the importance of each risk factor reflecting experience of an

Art Unit: 3623

implementing entity regarding the extent to which the risk factor may negatively impact a software implementation project if the risk factor is not adequately addressed (paragraph 53: "based on weighting variables defined by experts in the field." Whereby the expert would understand the importance and would reflect the experience of the potential negative impact if the factor was not considered), the importance value and maximum score for each factor is multiplied to define a weighted score for each factor (paragraph 74: "a risk assessment application calculates an initial risk assessment score." Whereby this calculation represents the calculation of a score for the risk factor); receive an actual score for each factor based on an analysis by the implementing entity specific to the particular software project (paragraph 97: "Logs may include risk scores associated with the clients, flags indicating high risk, goals, and other data such as detailed information about the primary client and associated secondary clients." Whereby an actual score is calculated for each factor.); generate an actual weighted score for each risk factor by multiplying the importance value and the actual score for the risk factor (paragraph 26: "Another aspect of the present invention is to provide a method of risk assessment where relative weights of risk assessment variables are determined and refined to produce accurate assessments."); determine a relationship between the potential weighted score and the actual weighted score for each factor (paragraph 93: "Process 401 represents a step that may be included to initiate a risk assessment application when using ANN or AFLRA based applications. Input-output data sets of known risk assessment input and expected output are first obtained. This "historical" data is then stored in database 304 during

process 402. The historical data set is used to train the ANN or AFLRA software in process 403 using error backpropagation or other training algorithms known to those skilled in the art. Of course, it is to be understood that steps 401-403 are not always necessary if a fuzzy logic expert system is used alone as the risk assessment application in the present invention." Whereby the algorithm relates between the historical or potential data and the actual data); assign a risk level for the particular project to each risk factor according to the relationship between the potential weighted score and the actual weighted score for the risk factor, the risk level for each factor representing an assessment by the implementing entity regarding the extent to which the factor is not adequately addressed (paragraph 101: "When a dangerously high-risk level is assessed for a primary client, system 300 may suggest other means of notification" whereby a flag may be generated as noted in paragraph 90 to indicate the level was exceeded.); and generate a risk assessment for the project comprising one or more of the assigned risk levels for the project for one or more corresponding risk factors (paragraph 101: "When a high-risk assessment is generated by system 300" whereby an assessment is conducted with respect to a risk level.).

As per claims 2, 13 and 24, Schwartz teaches the components generate a risk assessment scorecard for display which provides risk factors and the importance value, maximum score, potential weighted score, actual score, actual weighted score and risk level for each factor in a spreadsheet format (paragraph 84: "Each listing 508 may comprise a URL, which when selected, causes server 302 to download and display on the worker computer 310 the selected primary client's detailed information

stored in database 304.” Whereby the detailed information would comprise the various score values.).

As per claims 3, 14 and 25, Schwartz teaches the maximum score is the same for each risk factor; and the importance value and maximum score for a risk factor remain constant across multiple projects (paragraph 96: “Decision block 417 represents a process where an initially assessed risk score is compared to a maximum acceptable value. If the assessed risk score does not exceed the acceptable value, no unacceptable risk is present and the system returns to standby mode (process 404). If the initial score is indicative of unacceptable risk (high risk), process 428 is performed to determine and store an initial “goal.” The initial goal may be determined by a worker or generated automatically by system software 324.” Whereby the worker may generate the maximum score allowed and may keep them all the same value.).

As per claims 4, 15 and 26, Schwartz teaches the risk factor is associated with one of a plurality of risk factor categories, each risk factor category comprising one or more risk factors (paragraph 46: “include several risk categories for which the present invention can be used.” And paragraph 59: “input variables representing risk factors”).

As per claims 9, 20 and 31, Schwartz teaches the actual score for a risk factor is determined by the implementing entity and is based on an evaluation of client resources and capabilities relevant to the risk factor (paragraph 53: “Risk assessment is a complex process where decisions leading to a risk assessment score are made based on weighting variables defined by experts in the field. A composite risk score is reached by combining weighted contributions of these variables. Whether a variable is

Art Unit: 3623

particularly relevant, or should be minimized, is usually left to the judgement of an expert in the particular field of risk being assessed. Additionally, variables under consideration when assessing risk, by their nature, are often imprecise or uncertain in the classical first order logic and classical probability theory sense. Because the number of relevant variables and determination of particular weights assigned to them present a formidable task for a system designer, known systems often produce scores that fail to adequately represent risk." Whereby the implementing entity (or seller) would be an expert and able to assign weights to lead to the calculation of the actual risk score.).

As per claims 11, 22 and 33, Schwartz teaches the assigned risk level is selected from the group consisting of high, medium and low (paragraph 104: "Furthermore, while a composite risk score is discussed above as being associated with a "level," it is to be understood that a level may be associated with a value within a range of values that define a particular classification category of risk, such as "low risk," "mid risk," or "high risk," for example.").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 8, 10, 16, 19, 21, 27, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz.

As per claims 5, 16 and 27, Schwartz teaches the components are collectively operable to generate a risk assessment for each risk factor category according to a category percentage risk for each risk factor category, the category percentage risk being determined by (paragraph 46): determining a quotient of a category actual score and a category maximum score (paragraph 50: "Variable values are then processed by a computer risk assessment application in the system to determine a composite risk score that indicates a level of risk present at the time the values were determined."), the category actual score reflecting the sum of the actual scores of all risk factors within a risk factor category, the category maximum score reflecting the sum of the maximum scores of all risk factors within a risk factor category; determining the quotient by dividing the category actual score by the category maximum score; and determining the category percentage risk by multiplying the quotient by one hundred (Official notice is taken that both the concept and advantage of mathematical manipulation are well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to manipulate the data by adding, dividing and multiplying combinations of data to facilitate the analysis of the information.).

As per claims 8, 19 and 30, Schwartz teaches the implementing entity is a seller of software to be implemented in the particular software implementation project at one or more sites of a client (paragraph 75: "Preferably, the risk assessment application is accessible by, or part of an overall system application that performs risk assessment,

monitors risk, and assists workers in the field in managing primary client risk, thus forming a risk assessment, risk monitor, and case management system. This system application may be implemented by software on a computer. The risk assessment application of the present invention may be implemented with a software application or hardware that resides in the computer. Other data processing, data storage, and data retrieval of the system may be performed using the system software stored in the computer. The computer may be a server connected to a network with other devices capable running an Internet browser or other software that can be used to send, receive and display Web page information. These devices may include personal computers, portable computer devices, such as handheld or laptop computers, electronic paper, video monitors, audio systems, and wireless devices, such as wireless phones and PDA (Personal Data Assistant) devices. Other devices known to those skilled in the art are intended to be in the scope of the present invention." Official notice is taken that both the concept and advantage of having the seller install the software is well known and expected in the art. The software that is on the system would need to be installed by a person initially and it is known and common that the company that makes the software would send a sales representative to the site to install the software and set up the licenses on multiple site locations. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the seller to install the software to provide a more efficient means for initial set up of the system).

As per claims 10, 21 and 32, Schwartz teaches the relationship between the potential weighted score and the actual weighted score for each risk factor (paragraph

93: "Process 401 represents a step that may be included to initiate a risk assessment application when using ANN or AFLRA based applications. Input-output data sets of known risk assessment input and expected output are first obtained. This "historical" data is then stored in database 304 during process 402. The historical data set is used to train the ANN or AFLRA software in process 403 using error backpropagation or other training algorithms known to those skilled in the art. Of course, it is to be understood that steps 401-403 are not always necessary if a fuzzy logic expert system is used alone as the risk assessment application in the present invention." Whereby the algorithm relates between the historical or potential data and the actual data), determining assignment of the risk level for the risk factor (paragraph 101: "When a dangerously high-risk level is assessed for a primary client, system 300 may suggest other means of notification" whereby a flag may be generated as noted in paragraph 90 to indicate the level was exceeded.), is a percentage based on one minus the quotient of the actual weighted score and the potential weighted score for each risk factor (Official notice is taken that both the concept and advantage of calculating a risk factor utilizing the formula mentioned is well known and expected in the art. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to calculate a risk factor this way to provide a means for weighting the risk and thus providing a more accurate score.).

5. Claims 6-7, 17-18 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz in view of Barton et al (US 2002/0059093).

As per claims 6, 17 and 28, Schwartz does not explicitly teach the components are collectively operable to generate a risk factor category scorecard for display. Baron teaches that it is well known to generate a risk factor scorecard for display (See Figure 17: scorecard), the category scorecard providing the risk factor categories and the category actual score, category maximum score, and category percentage risk for each risk factor category (See Figure 17 which contains percentages and categories with maximum scores under the "infrastructure" and "routine & controls" headings.). Baron is an analogous art in that it also teaches about identifying and prioritizing risks. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the risk assessment system of Schwartz with the scorecard feature of Barton to provide a more efficient means of displaying the risk factor information.

As per claims 7, 18 and 29, Schwartz does not explicitly teach a spider chart for display. Baron teaches that it is well known to have components that collectively generate a risk factor category spider chart for display, the chart comprising a polygon with a number of sides equal to the number of risk factor categories, each pair of sides meeting at a vertex, a ray to each vertex, reflecting a range of category percentage risks for a corresponding risk factor category, a data point on a particular ray reflecting the category percentage risk for the corresponding risk factor category (See Figure 16: The risks are listed with their respective data point scores as well as total RPN scores for each category. Official notice is taken that the concept and advantage of calculating a percentage value for the risks is well known in the art, as noted by those calculated in Figure 17. Therefore it would have been obvious to one of ordinary skill in the art to

calculate a risk percentage based upon the category values.). Baron is an analogous art in that it also teaches about identifying and prioritizing risks. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the risk assessment system of Schwartz with the chart feature of Barton to provide a more efficient means of displaying the risk factor information.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art also teaches about risk assessment: Karmali (US 2002/0147676), "Identifying software project risks: An international Delphi study" by Roy Schmidt et al, Journal of Management Information, Spring 2001, vol 17, issue 4; "Software Metrics: Roadmap" by Norman Fenton et al, Future of Software Engineering, Limerick, Ireland, Copyright 2000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda Krisciunas whose telephone number is 571-272-6931. The examiner can normally be reached on Monday through Friday, 6:30 am to 3:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMK

LMK
Dec 30, 2005


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3800